



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,389	01/04/2005	Diego Melpignano	IT02 0021 US	5170

24738 7590 10/09/2007  
PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
370 W. TRIMBLE ROAD MS 91/MG  
SAN JOSE, CA 95131

EXAMINER
----------

CEHIC, KENAN

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/520,389

Applicant(s)

MELPIGNANO ET AL.

Examiner

Kenan Cehic

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/04/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because "disclosed" in line 1. Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Objections*

3. Claims 1-17 are objected to because of the following informalities:  
  
For claim 1, the reference characters, MT and AP1-3, are not considered and it is suggested to applicant to delete those. Similar problems exist in claims 2-12, 15.  
  
For claim 4, the claim limitation "said change" in line 4 is the first occurrence. It is suggested to applicant to change this to --a change--.  
  
For claim 4, the claim limitation "a user" in line 5 seems to refer back to "a user" in claim 4 line 4. If this is true it is suggested to applicant to change the limitation to --said user--  
  
For claim 6, , the claim limitation "said interface" in line 2 is the first occurrence. It is suggested to applicant to change this to --a interface--.

Art Unit: 2616

For claim 8, the claim limitation “a plurality of said interfaces” in line 2 seems to refer back to “a plurality of network interfaces” in claim 1 line 5. If this is true it is suggested to applicant to change the limitation to –said plurality of network interfaces —

For claim 11, the claim limitation “said interface” in line 5 is the first occurrence. It is suggested to applicant to change this to –interface--.

For claim 14, the claim limitation “said communications standard” in line 2 seems to refer back to “one of a plurality of communications standards” in claim 1 line 3. If this is true it is suggested to applicant to change the limitation to –said one of a plurality of communications standards —

The rest of the claims are objected to since they depend on objected claims.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 16-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For claims 16-17, the claim limitation “computer product” in claim 16 line 1 and “A data carrier having the computer program product in claim 17 line 1, is not a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof because there is no physical structure/connection of medium recited in the claims.

To overcome this rejection, it is suggested to change "carrier medium" to - - computer readable medium encoded with a computer program - -.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 5, 8, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 4,5, and 8, the term "preferably", in lines 4,3, and 4 respectively, render the claims indefinite.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

Art Unit: 2616

international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claim 1, 2, 5, 10, 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Eneborg Mats et al. (WO 01/35585 A1), hereinafter Mats.

For claim 1, Mats discloses wireless client device (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) for use in an Internet Protocol (IP) compatible communications network (see page 7 lines 12-14 “IP network”), said client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) being adapted to communicate with said network (see page 7 lines 12-14 “connected to IP network” and page 9 lines 17-21 “communicating data with network”) in accordance with one of a plurality of communications standards (BT, IEEE802.11, GPRS) (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access”) and to make a selection (see page 9 lines 17-21 “selecting access mechanism” and page 10 lines 9-13 “corresponding access network is selected”.) for connection to said network (see page 7 lines 12-14 “connected to IP network” and page 9 lines 17-21 “communicating data with network”) from among a plurality of network interfaces (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access” and Figure 1, 121-125) *said device* (MT) device (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) being

Art Unit: 2616

arranged in use to make a said selection automatically (see page 15 lines 25-28 “automatic process”) and according to a predetermined network interface selection policy (NISP) (see page 5 lines 12-16 “preferred access capability” and “preferred capabilities” and Figure 2, 211 and page 9 lines 21-23 “user preferences”) implemented in said client device (see page 5 lines 12-16 “preferred access capability with end device” and see Figure 2, 211-212).

For claim 2, Mats discloses said network interface selection policy (NISP) (see page 5 lines 12-16 “preferred access capability” and “preferred capabilities” and Figure 2, 211 and page 9 lines 21-23 “user preferences”) is selected for implementation (see page 9 lines 17-21 “considered by the user to be of greatest importance is selected”) by user intervention (see page 9 lines 17-20 “updated by a user” and page 15 lines 1-5 “how to select....based on individual preferences”) or by said client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) itself automatically (see page 15 lines 25-28 “automatic process”) from among a predefined set of said selection policies stored therein (see page 5 lines 1-3 “cost of service, quality of service etc”).

For claim 5, Mats discloses wherein said client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) is adapted to test for the availability (see page 9 line 23 through page 10 lines 2 “identify the available access mechanism “access discovery...handshaking needed to establish a communication link”) of one or more of said network interfaces (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access” and Figure 1, 121-125) preferably by periodically (page 13

lines 13-16 “periodically” and page 15 lines 10-13 “periodic search) performing a scan of available interfaces availability (see page 9 line 23 through page 10 line 2 “identify the available access mechanism “access discovery...handshaking needed to establish a communication link”, and page 15 lines 10-13 “periodic search may be made for available access network”).

For claim 12, Mats discloses wherein said client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) is adapted to check (see Figure 4, 420 and page 15 lines 10-13 “periodic search”), at least periodically (see page 15 lines 10-13 “periodic search”), the availability (see page 15 lines 10-13 “available”) of one or more access points (AP1-3) (see page 15 lines 10-13 “access network terminating device”) neighboring (see Figure 1, 121-125 “short range”) a currently connected access point (see Figure 4, 419).

For claim 13, Mats discloses wherein a said network interface selection policy (NISP) (see page 5 lines 12-16 “preferred access capability” and “preferred capabilities” and Figure 2, 211 and page 9 lines 21-23 “user preferences”) includes consideration of at least one of usage cost (see page 13 line 28 “cost of access”), bandwidth availability (see page 13 line 28 “bandwidth available”), link quality (see page 9 line 10 “quality”).

For claim 14, Mats discloses wherein a said communications standard (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access”) comprises one of Bluetooth (see page 8 lines 7-9 “Bluetooth”), and GSM (see page 7 line 24 “GSM”).



For claim 15, Mats discloses a method of performing communication (see page 7 lines 12-14 “connected to IP network” and page 9 lines 17-21 “communicating data with network”) in an Internet Protocol (IP) compatible network (see page 7 lines 12-14 “IP network”), the method including:

a) connecting a client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) to said network (see page 7 lines 12-14 “IP network”) in accordance with one of a plurality of communications standards (BT, IEEE802.11, GPRS) (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access”); and changing (see page 9 lines 17-21 “selecting access mechanism” and page 10 lines 9-13 “corresponding access network is selected”) automatically (see page 15 lines 25-28 “automatic process”) between said communications standards (see page 7 line 27 to page 8 line 3 “cellular access”, “LAN access”, “satellite access”) under predetermined circumstances ( see page 11 lines 20-26 “best access mechanism” and page 14 lines 18-22 “best match of all available access terminating devices; and Figure 4, 415) defined in a network interface selection policy (NISP) (see page 5 lines 12-16 “preferred access capability” and “preferred capabilities” and Figure 2, 211 and page 9 lines 21-23 “user preferences”) implemented in said client device (see page 5 lines 12-16 “preferred access capability with end device” and see Figure 2 , 211-212).

For claim 16, Mats discloses a computer program product (see page 12 lines 10-14, “Processor...conduct steps”) for executing a method according

to claim 15 (see Figure 4, 410-423) when executed on a computing device (see page 12 lines 10-14, "Processor")

For claim 17, Mats discloses a data carrier (see Figure 3, 321) having the computer program product (see page 12 lines 10-14, "Processor...conduct steps") of claim 16 encoded thereon as an executable program (see page 12 lines 10-14, "Processor...conduct steps").

9. Claim 1, 2, 5, 6, 15 is rejected under 35 U.S.C. 102(e) as being anticipated by Henry et al. (US 7,180,876), hereinafter Henry.

For claim 1, Henry discloses wireless client device (see column 2 lines 1-4 "mobile device" and Figure 1, "Mobile host") for use in an Internet Protocol (IP) compatible communications network (see Figure 1, "Internet" and column 3 lines 13-14 "IP tunneling"), said client device (MT) (see column 2 lines 1-4 "mobile device" and Figure 1, "Mobile host") being adapted to communicate with said network (see Figure 1, 102 communicates with 108 and see column 2 lines 29-38 "system 100...Access can be provided via the Internet) in accordance with one of a plurality of communications standards (BT, IEEE802.11, GPRS) (see column 2 lines 39-46 "GPRS" and "802.11 WLAN" and column 3 lines 16-24 "3G network", "WLAN") and to make a selection (see Figure 3, 302, 308) for connection to said network (see Figure 1, 112a, 112b and Figure 1, 102 communicates with 108 and see column 2 lines 29-38 "system 100...Access can be

provided via the Internet) from among a plurality of network interfaces (see Figure 2, 202, 204 and Figure 1, 112a, 112b) *said* device (MT) device (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile host”) being arranged in use to make a said selection automatically ( see Figure 3, 312 “Yes”, method selects interface by itself and column 4 lines 6-16 “interface is maintained ...until predetermined time interval expires or it quality falls”) and according to a predetermined network interface selection policy (NISP) (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...” ) implemented in said client device (see column 3 lines 1-3 “within a mobile device”).

**For claim 2**, Henry discloses wherein a said network interface selection policy (NISP) (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...” ) is selected (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...” ) for implementation by user intervention (see column 3 lines 55-60 “specified...user according to predetermined criteria...” ) from among a predefined set (see column 3 lines 57-62 “data rate, cost and user application” and “signal strength, signal-to-noise level, bit error rate throughout put etc.”) of said selection policies stored therein (see column 3 lines 57-62 “signal strength, signal-to-noise level, bit error rate throughout put etc.”).

Art Unit: 2616

For claim 5, Henry teaches wherein said client device (MT) ) (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile host”) is adapted to test for the availability (see column 4 lines 1-5 “available channels”) of one or more of said network interfaces (see Figure 2, 202, 204 and Figure 1, 112a, 112b), preferably by periodically (see column 3 lines 25-29 “periodically”) performing a scan (see column 3 lines 25-29 “monitor channel quality”) of available interfaces (see column 4 lines 37-39 “available interfaces)

For claim 6, Henry discloses wherein said client device (MT) ) (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile host”) is adapted to pre-connect (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) to a said interface selected (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) by a said network interface selection policy (NISP) (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...”), so as to test the availability (see column 3 lines lines 62-65 “quality better that its requirement is selected”, it is checked if an interface is there which is available according to requirement) of said interface (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) in advance of performing a handover (see column 3 line 65 through column 4 line 1 “selected interface is then used....switching among interfaces”) thereto from a currently connected interface (see column 3 line 65 through column 4 line 1 “selected interface is then used”).

**For claim 15**, Henry teaches a method of performing communication (see column 6 lines 35-38 “communicate”) in an Internet Protocol

(IP) compatible network (see Figure 1, “Internet” and column 3 lines 13-14 “IP tunneling”), the method including:

a) connecting a client device (MT) (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile host”) to said network (see Figure 1, “Internet” and column 3 lines 13-14 “IP tunneling”) in accordance with one of a plurality of communications standards (BT, IEEE802.11, GPRS) (see column 2 lines 39-46 “GPRS” and “802.11 WLAN” and column 3 lines 16-24 “3G network”, “WLAN”); and

changing (see Figure 3, 302, 308) automatically ( see Figure 3, 312 “Yes”, method selects interface by itself and column 4 lines 6-16 “interface is maintained ...until predetermined time interval expires or it quality falls”) between said communications standards (see column 2 lines 39-46 “GPRS” and “802.11 WLAN” and column 3 lines 16-24 “3G network”, “WLAN”) under predetermined circumstances (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...” defined in a network interface selection policy (NISP) (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...” implemented in said client device (see page 5 lines 12-16 “preferred access capability with end device” and see Figure 2 , 211-212).

Art Unit: 2616

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mats et al. (WO 01/35585 A1) in view of Sahinoglu et al. (US 6,954,650 B2).

Art Unit: 2616

For claim 3, Mats teaches the claimed invention as described in paragraph 8.

Mats further discloses, regarding claim 3, said network interface selection policy (NISP) see page 5 lines 12-16 “preferred access capability” and “preferred capabilities” and Figure 2, 211 and page 9 lines 21-23 “user preferences”)

includes a consideration of at least one of location (see page 5 lines 17-20 “coverage area”),

Mats is silent, regarding claim 3, about a mobility parameter indicative of whether a said location or context is dynamic or static and/or an indication of how such information has been gathered.

Sahinoglu from the same or similar field of endeavor teaches mobility parameter (see column 2 lines 65-67 “mobility parameters” indicative of whether a said location is dynamic or static (see column 2 lines 53-55 “speed and location coordinates”; speed can be zero thus static) .

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Sahinoglu et al., in order to provide ... (see column 2 lines 9-13).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view of Tarnanen et al. (US 2005/0147058).

For claim 4, Mats teaches the claimed invention as described in paragraph 8.

Mats does not disclose: as regarding claim 4, wherein said client device (MT) is adapted to change automatically between network interface selection policies (NISP) under predetermined circumstances, authority to make a said change preferably being provided by a user and or preferably being notified to a user.

Tarnanen et al. discloses wherein said client device (MT) (see Figure 1, MS) is adapted to change automatically (see section 0013 lines 8-10 "user does not need to update information" user only needs to confirm change) between network interface selection policies (NISP) (see section 0012 line 1-5 "how to correctly set the correct IAP" and 0013 lines 4-6 "IAP settings" and "IAP list") under predetermined circumstances (see section 0012 lines 1-3 "when he is in new area"), authority to make a said change (see section 0013 lines 6-8 "user to confirm change") preferably being provided by a user (see section 0013 lines 6-8 "user to confirm change") and/or preferably being notified to a user (see section 0013 lines 6-8 "asks the user").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Tarnanen et al., in order to avoid ... (see section 0012 lines 5-6).

14. Claim 6, 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view Henry et al. (US 7,180,876).

For claim 6, Mats discloses the claimed invention as described in paragraph 8.

Mats does not disclose: as regarding claim 6, wherein said client device (MT) is adapted to pre-connect to a said interface selected by a said network interface selection policy (NISP), so as to test the availability of said interface in advance of performing a handover thereto from a currently connected interface; as regarding claim 11, wherein a switch between said interfaces is performed by said client device (MT) in the event that a stronger or higher



priority interface becomes available or in the event that a connection to a network (BT, IEEE802.11, GPRS) that uses a current said interface is lost.

Henry, from the same or similar field of endeavor, disclose a mobile terminal with a selection method to choose interfaces.

For claim 6, Henry discloses wherein said client device (MT) (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile host”) is adapted to pre-connect (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) to a said interface selected (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) by a said network interface selection policy (NISP) (see Figure 3, “300” and column 4 lines 6-9 “determined if better interface exist based on link quality” and column 4 lines 25-29 “signal quality... is better by a predetermined margin...”), so as to test the availability (see column 3 lines lines 62-65 “quality better that its requirement is selected”, it is checked if an interface is there which is available according to requirement) of said interface (see column 3 lines 56-65 “ interface is selected such that the first interface on the ordered list”) in advance of performing a handover (see column 3 line 65 through column 4 line 1 “selected interface is then used....switching among interfaces”) thereto from a currently connected interface (see column 3 line 65 through column 4 line 1 “selected interface is then used”).

For claim 11, Henry disclose wherein a switch (see Figure 4, 412-416; if a next interface is better it is selected) between said interfaces (see Figure 2, 202, 204 and Figure 1, 112a, 112b) is performed (see Figure 4, 412-416; if a “next interface” is better it is selected) by said client device (MT) (see column 2 lines 1-4 “mobile device” and Figure 1, “Mobile

Art Unit: 2616

host”) in the event that a connection (see Figure 1, 102 and 112a-b form a connection) to a network (BT, IEEE802.11, GPRS) (see Figure 1, 112a-b) that uses a current said interface (see Figure 4, 412) is lost (see Figure 4, 414 “No”; signal quality requirement is not met when connection is lost).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Henry et al., in order to..... (see column 1 lines 50-58).

15. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view of Lotter et al. (US 2003/0219034 )

For claim 7, Mats teaches the claimed invention as described in paragraph 8.

Mats does not teach wherein said network interfaces are controlled by a multi-standard enabled wireless

adaptation layer implemented in an operating system of said client device.

Lotter et al from the same or similar field of endeavor teaches , wherein said network interfaces are controlled by a multi-standard (see section 0052 “co-operation between layers so as to enable protocols “) enabled wireless adaptation layer (see section 0054 lines 1-3 “Wireless Adaptation Layer”) implemented in an operating system (see section 0054 lines 3-7 “software”) of said client device (see section 0054 lines 3-7 “radios”).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Lotter et al., in order to provide ... (see section 0052).

Art Unit: 2616

16. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view of Aoki et al. (US 2002/0193112 ).

For claim 8, Mats teaches the claimed invention as described in paragraph 8.

Mats does not teach wherein a plurality of said interfaces are assigned a priority for implementation in a said network interface selection policy (NISP), a said priority preferably being changeable in said client device (MT) and more preferably being dynamically changeable to reflect current status of said interface.

Aoki from the same or similar field of endeavor teaches wherein a plurality of said interfaces (see section 0070 “base stations”) are assigned a priority (see section 0017 lines 1-4 “priority information for capable of connecting to a base station and see Figure 3 “Priority Information”) for implementation in a said network interface selection policy (NISP) (see section 0086 lines 1-3 “priority indicates prior order....apparatus should be connected”), a said priority (see section 0017 lines 1-4 “priority information for capable of connecting to a base station and see Figure 3 “Priority Information”) preferably being changeable (see section 0017 lines 6-7 “change the stored priority information” ) in said client device (MT) (see section 0017 lines 1-5 “mobile communication apparatus”) and more preferably being dynamically changeable (see section 0017 lines 6-7 “change the stored priority information” and section 0111 “apparatus....receive a control signal...has the higher priority SID”) to reflect current status (see section 0111 “higher priority”) of said interface (see section 0111 “base station”) .

Art Unit: 2616

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Aoki et al., in order to provide ... (see section 0017 lines 7-8).

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view of Tarnanen et al. (US 6,904,026)

For claim 9, Mats teaches the claimed invention is described as in paragraph 8.

Mats does not disclose: as regarding claim 9, wherein said client device (MT) stores information relating to access points currently available.

Tarnanen et al from the same or similar field of endeavor teaches and communication network with the following features:

As regarding claim 9, wherein said client device (MT) (see claim 1, line 4 "mobile station") stores (see claim 1 line 7 "mobile station storing" ) information (see claim 1 line 7 "settings") relating to access points (see claim 1 lines 7 "of Internet access points") previously visited (see claim 1 line 8 "that were used last time").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Tarnanen et al., in order to provide ... (see column 2 lines 65-67).

18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eneborg Mats et al. (WO 01/35585 A1) in view of Sunder et al. (US 2003/0188160).

For claim 10, Mats teaches the claimed invention is described as in paragraph 8.

Art Unit: 2616

For claim 10, Mats discloses wherein said client device (MT) (see page 7 lines 14-16 “cellular phone”, “wireless palmtop computer”) is adapted to monitor network interface (see page 15 lines 10-13 “access network”) availability (see page 9 line 23 through page 10 lines 2 “identify the available access mechanism “access discovery...handshaking needed to establish a communication link”, and page 15 lines 10-13 “periodic search may be made for available access network”) substantially continuously (see page 12 lines 25-28 “continuously”) and preferably keeps updated (see page 9 line 23 through page 10 lines 2 “identify the available access mechanism “access discovery...handshaking needed to establish a communication link”, and page 15 lines 10-13 “periodic search may be made for available access network”) .

Mats does not disclose: as regarding to claim 10, a stored list of available said interfaces. Sunder et al from the same or similar field of endeavor teaches a communication system with the following features:

As regarding claim 10, Sunder et al teaches a stored list (see section 0096 lines 7-9 “list of all available access points”) of available said interfaces (see section 0096 lines 7-9 “available access points”).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Proctor by using the features, as taught by Tarnanen et al., in order to provide for the user to connect to an access point which is available.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Balogh, Peter (US 2001/0024953)

Sahinoglu et al (US 6,954,650)

The above are recited to show communication systems with multiple interfaces.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenan Cehic whose telephone number is (571) 270-3120. The examiner can normally be reached on Monday through Friday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KC

**KWANG BIN YAO**  
SUPERVISORY PATENT EXAMINER

